## ABSTRACT OF THE DISCLOSURE

A double-wrap band brake assembly to be used for braking a rotating member fitted in a double-wrap brake band, which double-wrap brake band comprises an annular middle band with a friction surface formed on 5 the inner periphery thereof, a pair of annular outer bands which are coupled to the middle band in a state that the respective free ends thereof are opposed to the free end of the middle band, and which 10 respectively have friction surfaces on the inner peripheries, an anchor bracket secured to the working end of either one of the middle band and the outer bands and latched to the main body casing, and an apply bracket secured to the working end of the other 15 of the middle band and the outer bands for receiving a force in the direction of constriction of the middle band and the outer bands from an actuator. At least one of the middle band and the outer bands is provided with a first friction surface which is 20 brought into sliding contact with the rotating member with a first dynamic friction coefficient at the beginning of the braking and a second friction surface which is brought into sliding contact with the rotating member with a second dynamic friction 25 coefficient larger than the first dynamic friction coefficient at the beginning of the braking.